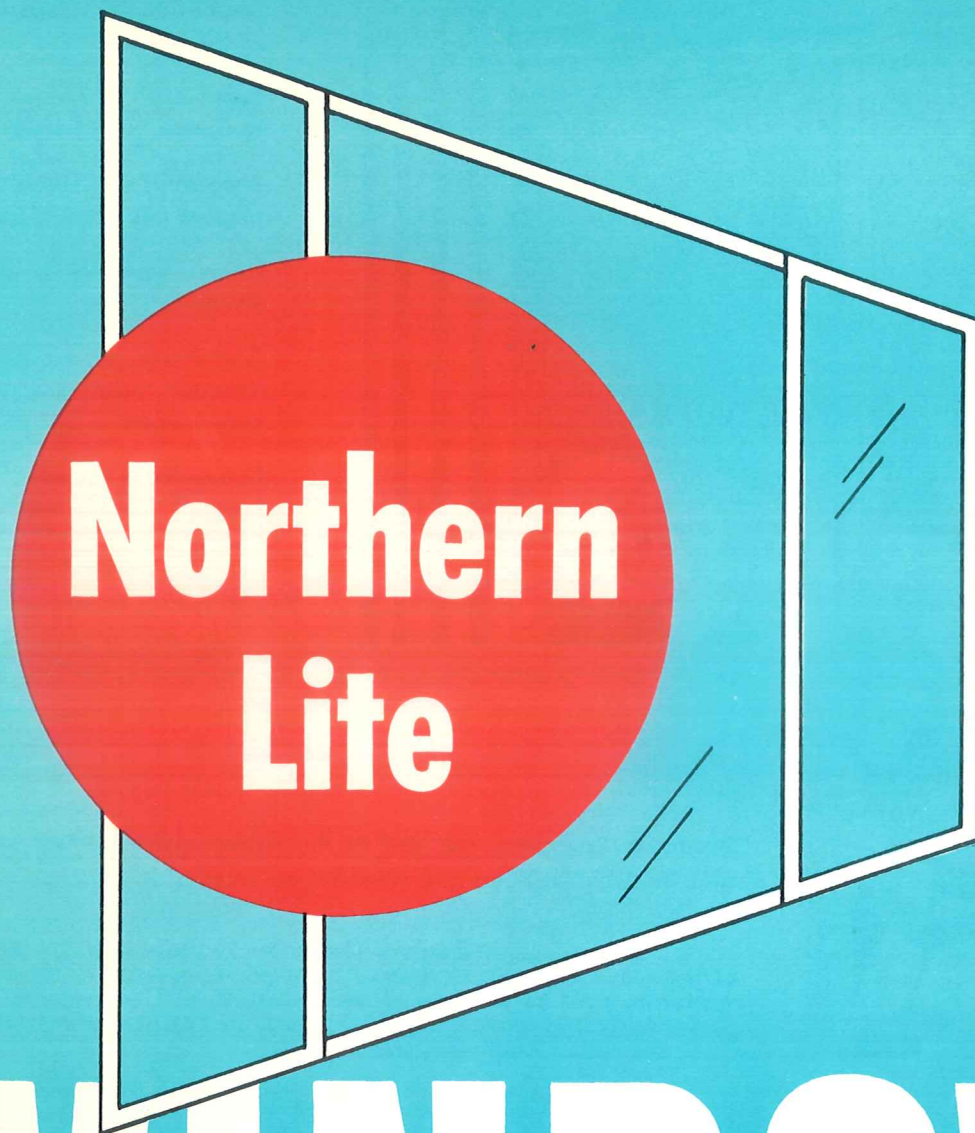


**modular**



# WINDOWS

**INSULATION ENGINEERS, inc.**

**Minneapolis, Minnesota**



your outlook is **bright** thru a **Northern-Lite!**



- Sturdily built to last the life of the home.
- Easy and effortless sliding operation "won't stick ever"
- Beautifully engineered to compliment any house design.
- Unique assembly is easy and simple to clean.
- Completely weather-tight with patented quadruple weather-strip feature.
- Economically priced to "fit the budget" of every family.

## 20 YEAR NORTHERN-LITE WARRANTY CERTIFICATE

Insulation Engineers, Inc. and its distributor and/or dealer warrant that the Northern-Lite Windows on your \_\_\_\_\_ at \_\_\_\_\_

\_\_\_\_\_, will operate freely for 20 years from the date of installation. If any Northern-Lite Window, covered under this warranty, fails to perform as warranted, it will be restored to proper operating condition by a Northern-Lite Distributor or Dealer ...or Insulation Engineers, Inc.

*This 20 Year Warranty is your assurance that the Northern-Lite Windows you have purchased are in keeping with our customary high standard of quality and product excellence in design, materials and workmanship.*

*This warranty does not apply if Northern-Lite Windows have been improperly installed or repaired by any person other than an Authorized Northern-Lite Window Representative or if the basic window design and/or insert arrangement have been altered in any way. Windows which will not operate properly because of abuse, lack of proper care and maintenance or normal wear and tear are not covered by this warranty. This warranty does not apply when window operation is retarded, impaired or prevented by distorted frames; accumulation of dirt or other foreign matter; damaged, broken or missing window components.*

*This warranty covers the original purchase only, and does not apply to damages or alleged defects that are the result of accidents, Acts of God, fires or floods.*

# 20 YEAR

## WARRANTY

against sticking or jamming  
or any other operational  
defect.



# RUSCO and NORTHERN-LITE windows

A Rusco NORTHERN-LITE Window is available in a wide range of modular sizes beautifully created to compliment any building design — contemporary — ranch style — colonial.

Ideally combining the strength of steel and the warmth of wood, the Rusco NORTHERN-LITE is a complete window unit consisting of Rusco's baked on enamel "White Beauty" self-storing prime storm and screen unit, plus the revolutionary NORTHERN-LITE interior wood sash with complete wood casing.

Rough frame opening allows  $\frac{5}{16}$ " space around perimeter of window to permit proper insulation. The brick mold overlaps the rough sheathing  $\frac{7}{8}$ ". Add 2" to rough frame opening width and  $\frac{1}{2}$ " to rough frame opening height for masonry rough opening.

## rough frame opening

2'1"

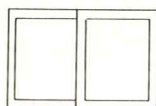
3'1"

4'1"

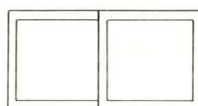
5'5"

8'1"

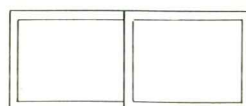
2'2"



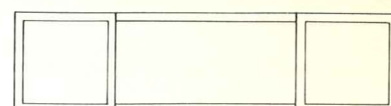
HJ3020



HJ4020



HJ5420

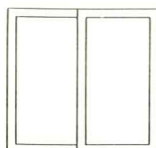


HJ8020C

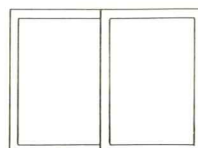
3'2"



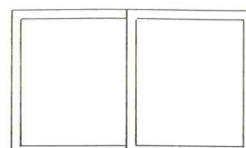
HJ2030



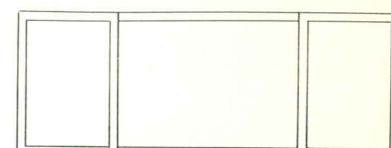
HJ3030



HJ4030

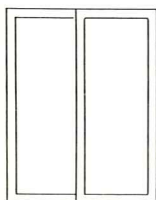


HJ5430

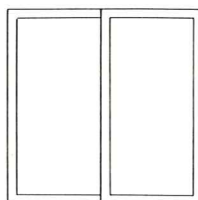


HJ8030C

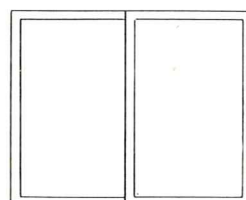
4'2"



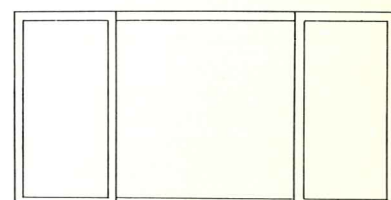
HJ3040



HJ4040

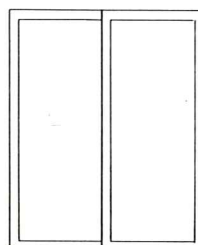


HJ5440

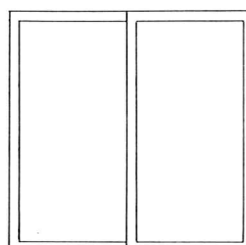


HJ8040C

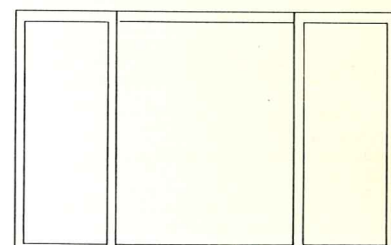
5'2"



HJ4050

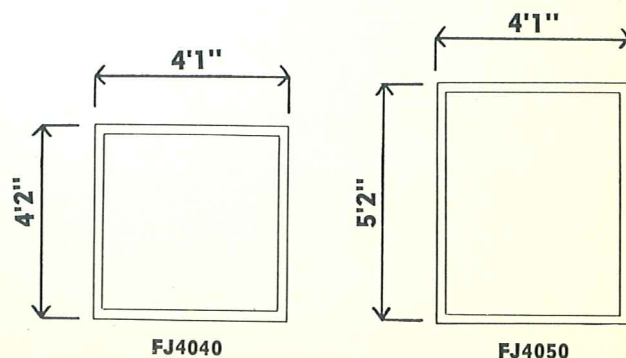
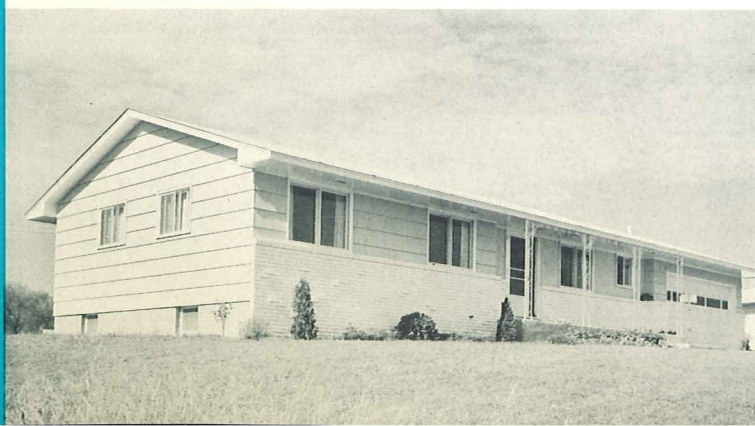


HJ5450

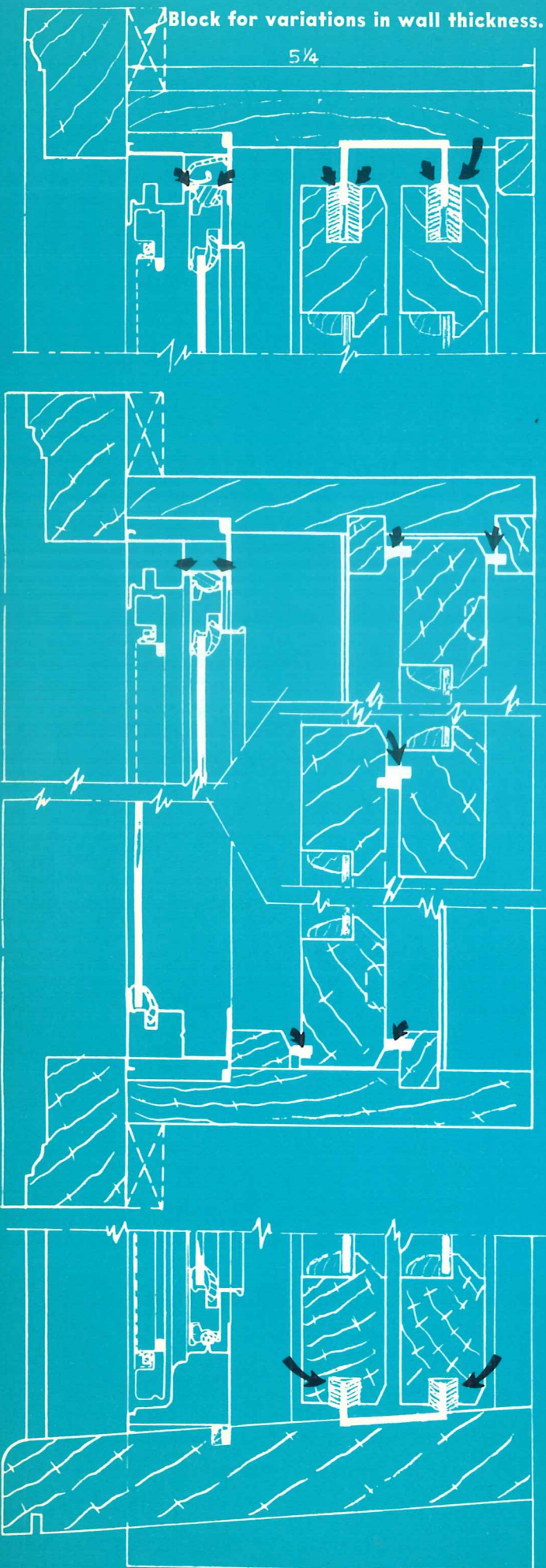


HJ8050C

BY WILLIAM A. LOFGREN & SONS  
MINNETONKA, MINN.







# RUSCO and "NORTHERN-LITE"\*

## SPECIFICATIONS

### LIGHT AND VENTILATION AREAS

Type	Sq. Ft. Lite Area	Sq. Ft. Ventilation
HJ 2020	3.8	1.9
HJ 3020	4.1	2.1
HJ 3030	6.5	3.3
HJ 3040	8.9	4.5
HJ 4020	5.7	2.9
HJ 4030	9.1	4.6
HJ 4040	12.6	6.3
HJ 4050	16.0	8.0
HJ 5420	8.0	4.0
HJ 5430	12.7	6.4
HJ 5440	17.5	8.8
HJ 5450	22.2	11.1
HJ 8020C	12.0	6.0
HJ 8030C	19.4	9.7
HJ 8040C	26.3	13.3
HJ 8050C	33.9	17.0
FJ 4040	13.2	0
FJ 4050	16.8	0

The prime self-storing Rusco storm and screen sash are tubular Armco steel, hot dipped galvanized, bonderized, and baked on white enamel, as manufactured by the F. C. Russell Co. of Columbiana, Ohio.

The NORTHERN-LITE interior sash and casing are wood, as manufactured by INSULATION ENGINEERS, INC.

The Rusco prime window is caulked into the casing with pliable caulking compound, thereby insuring a weather-tight unit.

The complete interior NORTHERN-LITE sash and exterior Rusco prime are quadruple weatherstripped (note location of multiple weatherstripping designated by black arrows on sectional drawing) with Schlegel weatherproof wool pile.

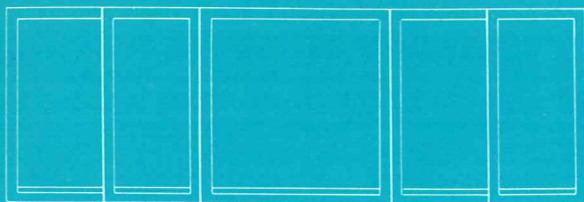
The interior NORTHERN-LITE sash is toxic treated clear pine, glazed with SSB and DSB glass set with wood glazing bead. DSB glass is used in sash totaling more than 60" of combined width and height.

The NORTHERN-LITE sash floats in weatherproof wool pile. The sash rides on monorails with Super-Dylon inserts riding directly on the extruded aluminum track. The friction free monorail design eliminates the need for springs, etc., at the head that would tend to fatigue or wear. The floating sash operate freely and are easily removable from the inside from any operating position.

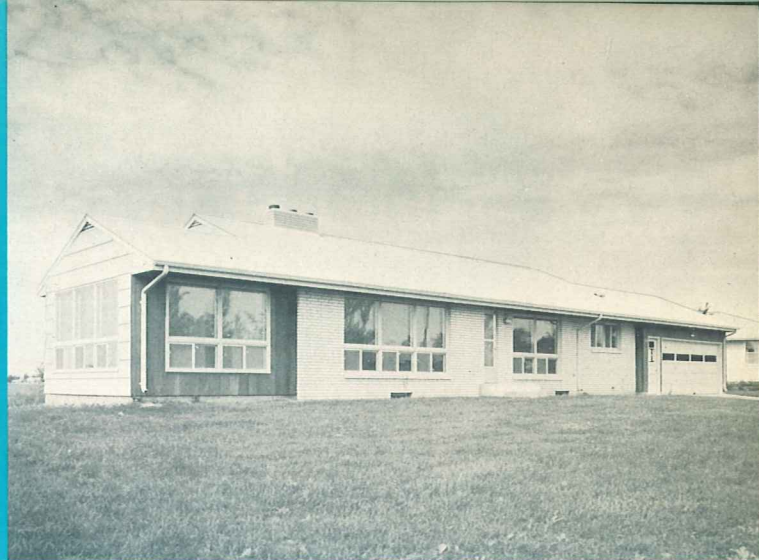
These advantages are yours in a competitively priced, fully assembled self storing window. You'll be pleasantly surprised with a quotation on Rusco NORTHERN-LITE window. Call our representative for a FREE estimate.

\* Patent Pending

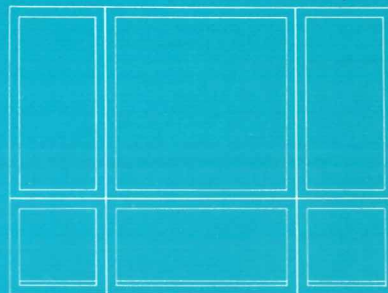




2 HJ 4040's flanking FJ 4040



BY E. A. ROTHE BLOOMINGTON, MINN.



HJ 8040 over HJ 8020

## mulling and stacking

All NORTHERN-LITE windows have been beautifully engineered so that they can be combined to produce an almost unlimited variety of window design combinations. Stacked vertically, and/or mulled horizontally, they meet any functional or aesthetic requirement.

NORTHERN-LITE windows are factory mulled or can be mulled in the field to allow a structural member between windows.

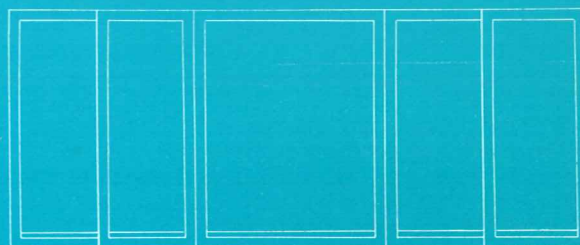
The frame rough opening widths of factory mulled windows are as follows:

**Twin Windows** nominal widths plus 1 3/8"

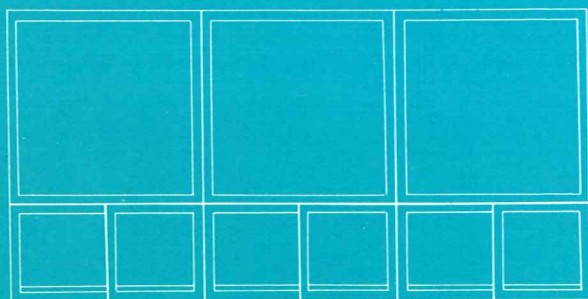
**Triple Windows** nominal widths plus 1 3/4"

**Quad Windows** nominal widths plus 2 1/8"

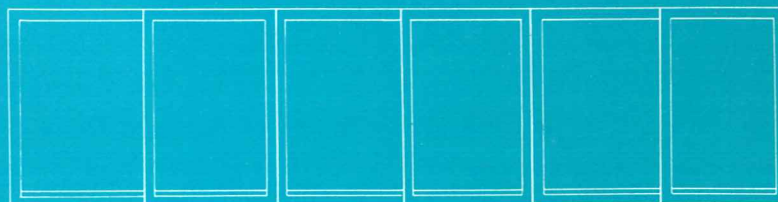
Frame rough opening heights of stacked windows are nominal heights plus 3 1/8".



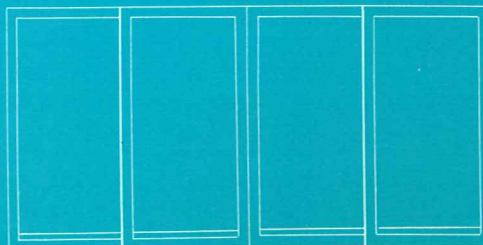
2 HJ 4050's flanking FJ 4050



Mulled FJ 4040's stacked over HJ 4020's



3 HJ 5440's mulled

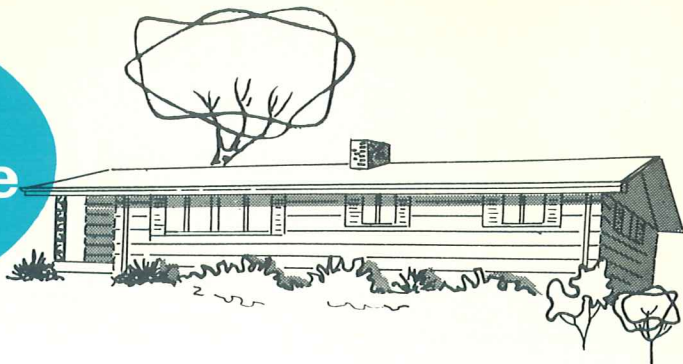


HJ5450 Twin



To insure a quality product  
and satisfied customers, we chose

## Schlegel Wool Pile weather seal



**Nothing else--metal, felt, rubber or plastic--offers all these advantages:**

1

### Positive Weather Protection

In tests and in actual use—in all climatic conditions—the millions of 100% virgin wool fibres (Dow-Corning *silicone* treated) in Schlegel Wool Pile provide positive protection against wind, rain, snow, dust and dirt. This performance has been proved by the rigid F.H.A. tests for air infiltration (mandatory for all prime windows used in buildings where F.H.A. loans are granted).

2

### Lower Heating and Air Conditioning Costs

Wool pile stops drafts. Its excellent sealing characteristics assure heating and air conditioning economies, year after year.

3

### Long Life

Laboratory tests show that hundreds of thousands of opening and closing actions cause no appreciable wear. The earliest installations, now more than 25 years old, are still in excellent working condition.

4

### Freedom From Noise

Wool pile weather seals provide a cushion between rigid surfaces that otherwise would bang and scrape or rattle on windy days. Moving parts ride quietly on dense pile fabric.

5

### Easy Operation

Millions of flexible fibres, given even greater resiliency by treatment with Dow-Corning silicone, act as tiny individual "bearings." Unaffected by temperature changes, they "give" to let moving parts operate easily; then spring back at once to hold and seal. Windows and doors fitted with Schlegel Wool Pile will not stick or jam.

6

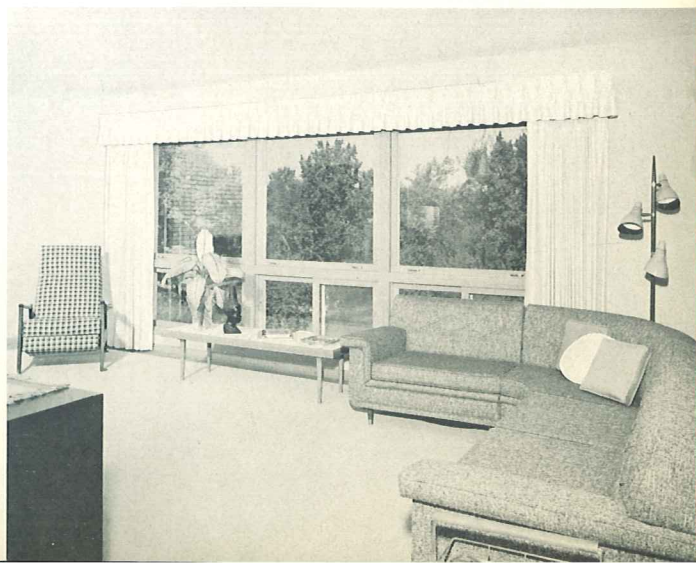
### Engineered Accuracy

The forms of Schlegel Wool Pile weather seal in our products have been carefully specified and made to close tolerances—to assure maximum sealing, easy and silent operation, and long life.

7

### True Economy

Schlegel Wool Pile ends call backs due to faulty weather-stripping performance. The customer, satisfied with protection that saves his money, pleased with smooth performance, will not hesitate to make recommendations.





# Northern-Lite windows "won't stick . . . ever!"



## Easy To Operate

Sash floats in weatherproof wool pile —rides on monorails with Super-Dylon inserts on extruded aluminum track. Friction-free with no binding or sticking.

## Safety and Convenience

Window panels quickly removed from the inside for easy cleaning.

## Finest Quality Clear Pine

Toxic treated frames and wood parts — gives added beauty to window inside and out.

## Distinctive New Design

Permits unique draft-free indirect ventilation.

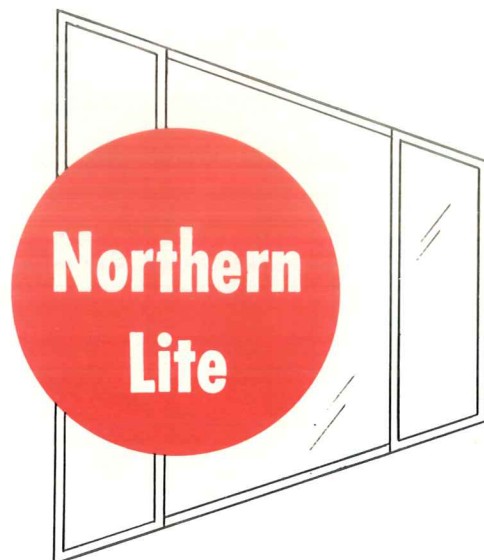
## Superior Weatherstripping

Famous Schlegel wool pile interlocks at all points for positive protection against weather conditions.

Just imagine the pleasure of completely smooth, silent and easy sliding window units. No springs or mechanisms to go awry — unit floats in weatherproof wool pile. Rides on monorails of extruded aluminum track with Super-Dylon inserts — trouble-free operation. Units are easily removed for cleaning — even the stationary out-

side pane is simple to reach without stretching or effort.

Northern-Lite window units offer outstanding improvements in window design and are carefully styled and engineered to compliment and beautify all styles of homes.



**INSULATION ENGINEERS, inc.**  
**6318 Cambridge Street St. Louis Park**  
**Minneapolis 16, Minnesota WEst 9-6794**  
**Evenings call WEst 5-4575 or GReenwood 4-6032**